

REMARKS

Claims 1-30 were pending in the present application. Claims 4-5, 7-9, 11, 21, 23, 25-26, and 31 have been canceled. New claims 37-42 have been added, and these claims included the subject matter the Examiner stated was allowable in the April 20, 2006 Office Action.

Reconsideration of the application is respectfully requested in view of the following responsive remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the office action of April 20, 2006, the following actions were taken:

- (1) Claims 1-5, 7-9, 23, 25, 29-31, and 36 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,790,878 to Kurabayashi;
- (2) Claims 1, 6-11, 17-18, 23, 25, 29-30, and 36 were rejected under 35 § 102(e) as being anticipated by U.S. Patent No. 6,730,149 to Arita et al.;
- (3) Claims 1-11, 17-25, 29-32, and 36 were rejected under 35 § 102(e) as being anticipated by U.S. Application 2003/195274 to Nakamura et al.;
- (4) Claims 1, 6-11, 22-25, 27-30, 32, and 34-36 were rejected under 35 § 102(e) as being anticipated by U.S. Patent No. 6,864,302 to Miyabayashi;
- (5) Claims 18-25 were rejected under § 35 U.S.C. § 102(b) as being anticipated by International Application No. WO0020520 to Fyrd;
- (6) Claims 12, 13, 26, and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kurabayashi;
- (7) Claims 14-16 were deemed to be directed to allowable subject matter but were objected to as depending from a rejected base claim.

It is respectfully submitted that the presently pending claims be examined and allowed. Applicants submit that each and every amendment herein, and throughout the prosecution of the present application is fully supported by the specification as originally filed, and that no new matter has been added.

Rejections under 35 U.S.C. § 102

The Examiner has rejected claims 1-11, 17-21, 23-32, and 34-36 under 35 U.S.C. 102 over several references. These rejections are rendered moot in light of the present amendment. By the present amendment, claims 1, 18, and 30 have been amended to incorporate the subject matter recited in original claims 12-16. Specifically, the currently amended claims each recite a pigment encapsulated with a polymer selected from the group consisting of styrene-vinylsulfonic acid copolymer, styrene-butyl acrylate-methacrylic acid-vinylsulfonic acid copolymer, styrene-trifluoroacrylic acid-vinylsulfonic acid copolymer, styrene- α -(trifluoromethyl)acrylic acid-vinylsulfonic acid copolymer, and styrene-trifluoro acrylic acid copolymer. As the Examiner has acknowledged, the invention as claimed in these claims (12-16) are all novel over the cited prior art. Therefore, Applicant respectfully requests that these rejections be withdrawn.

Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 12, 13, 26, and 33 as being obvious in view of U.S. Patent No. 6,790,878 to Kurabayashi. The subject matter of claims 12 and 13 are now present in each of the rejected independent claims (claims 11, 18, and 30), and as such, discussion of these claims is thought appropriate.

Before addressing these rejections, the following discussion of applicable case law is considered an important background for the Examiner to keep in mind during this discussion.

In order to maintain a *prima facie* case of obviousness by combining references, the prior art must provide some reason or motivation to make the claimed compositions. *In re Dillon*, 16 U.S.P.Q.2d 1897, 1901 (Fed. Cir. 1990). As aptly stated in *In re Jones*, 21 U.S.P.Q.2d 1941, 1943-44 (Fed. Cir. 1992):

"Before the PTO may combine the disclosure of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art... Conspicuously missing from this record is any *evidence*, other than the PTO's speculation (if it be called evidence) that one of ordinary skill in the...art would have been motivated to make the modifications of the prior art necessary to arrive at the claimed (invention)."

An excellent summary of how the prior art must be considered to make a case of *prima facie* obviousness is contained in *In re Ehrreich et al.*, 220 U.S.P.Q. 504, 509-511 (CCPA 1979). There the court states that a reference must not be considered in a vacuum, but against the background of the other references of record. It is stated that the question of a § 103 case is what the reference(s) would "collectively suggest" to one of ordinary skill in the art. However, the court specifically cautioned that the Examiner must consider the entirety of the disclosure made by the reference and avoid combining them indiscriminately.

In finding that the "subject matter as a whole" would not have been obvious in *Ehrreich* the court concluded:

"Thus, we are directed to no combination of prior art references which would have rendered the claimed subject matter as a whole obvious to one of ordinary skill in the art at the time the invention was made. The PTO has not shown the existence of all the claimed limitations in the prior art or any suggestion leading to their combination in the manner claimed by applicants." (underlining added)

It has been widely recognized that virtually every invention is a combination of elements and that most, if not all, of these will be found somewhere in an examination of the prior art. This reasoning lead the court, in *Connell v. Sears,*

Roebuck & Co., 220 U.S.P.Q. 193, 199 (Fed. Cir. 1983) to state:

"...it is common to find elements or features somewhere in the prior art. Moreover, most if not all elements perform their ordained and expected function. The test is whether the claimed invention as a whole, in light of all the teachings of the references in their entireties, would have been obvious to one of ordinary skill in the art at the time the invention was made." (underlining added)

In re Sernaker, 217 U.S.P.Q. 1, 5-6, (Fed. Cir. 1983) states a test to determine whether a rejection of an invention based on a combination of prior art elements is appropriate as follows:

"The lesson of this case appears to be that prior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings...The board never showed how the teaching of the prior art could be combined to make the invention." (underlining added)

Moreover, in *In re Dow Chemical Co.*, 5 U.S.P.Q.2d 1529, (Fed. Cir. 1988), the court states that both the suggestion and the expectation of success must be founded in the prior art, not in the applicants disclosure. The Federal Circuit stated in *In re Carroll*, 202 U.S.P.Q. 571, 572 (Fed. Cir. 1979):

One of the more difficult aspects of resolving questions of non-obviousness is the necessity "to guard against slipping into use of hindsight (citing *Graham v. Deere*). Many inventions may seem obvious to everyone after they have been made...(citation of §103)...Thus, in deciding the issue of obviousness, we must look at the prior art presented from a vantage point in time prior to when the invention was made, and through the eyes of a hypothetical person of ordinary skill in the art.

With the above background in mind, Applicant contends that the Patent Office has failed to meet its burden of making a *prima facie* case of obviousness. The Examiner has not shown that the cited references provide sufficient teachings or motivation to be combined in order to arrive at Applicant's invention. Therefore, without knowledge of the disclosure of the present invention, one of ordinary skill in the art would not be able to make the combinations proposed to arrive at the claimed invention. It is noted that only Kurabayashi is used for the obviousness rejection against claims 12 and 13. Thus, only Kurabayashi will be discussed under this section.

Kurabayashi discloses a coloring material encapsulated in a resin which may be a polymer prepared from a monomer with a hydrophilic group and a monomer with a hydrophobic group. Col 8, lines 1-3. Kurabayashi then lists a number of examples of monomers having hydrophilic groups and monomers having hydrophobic groups. Kurabayashi does not, however, teach the specific copolymers required by the present invention. The Examiner has argued that the copolymers of the present invention would be within the bounds of routine experimentation in view of Kurabayashi. Applicant submits that this is not the case.

The present invention provides a polymer-dispersed pigment that is stable in a liquid vehicle at near-neutral pH. Kurabayashi is not directed to this outcome, and does not teach that the resins disclosed therein are directed to such an outcome. Furthermore, the constituent monomers required by the prior art are only presented in lists of possible candidate monomers, with no teaching that would point to their desirability in the combinations specifically set forth in the claims. In view of this,

the Kurabayashi reference provides no motivation for one skilled in the art to arrive at the copolymers of the present invention as opposed to the numerous other polymers that might be envisaged from the lists provided. At best, the reference invites one skilled in the art to try various monomer combinations in an effort to make a polymer-dispersed pigment having stability according to the present invention. However, whether a claimed combination of elements might be obvious to try is an impermissible standard of patentability. E.g., *In re Fine*, 837 F.2d 1071, 1075.

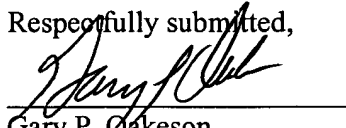
Applicant submits that the Examiner has not made a *prima facie* case of obviousness in view of Kurabayashi, because that reference neither suggests nor provides a motivation to arrive at the claimed copolymers. As such, Applicant reiterates that all of the present claims, including those reciting these copolymers, are patentable over the cited references.

In view of the foregoing, Applicants believe that all the pending claims present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be removed during a telephone interview, the Examiner is invited to telephone W. Bradley Haymond (Registration No. 35,186) at (541) 715-0159 so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025.

Dated this 20th day of July, 2006.

Respectfully submitted,



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